Star Exercise 3A

Purpose

- Use the “Device Setting Report” to add protective device settings

Project:	STAR Example	**ETAP**	Page:	1
Location:	Irvine, California	6.0.0C	Date:	09-30-2008
Contract:	OTI-12345678		Revision:	Base
Engineer:	Operation Technology, Inc.			
Filename:	STAR_EXERCISE3A			

Protective Device Settings

This is an example to show the features of STAR program.

OCR: Relay1

MFR: ABB

Model: CO

Tag #:

	CT	Base kV	If (kA)	
CT Input:	200/5	13.800	3.98	3 ph, Sym. (Calc.)
			3.66	LG, Sym. (Calc.)

OC Level: OC1

		Range	Setting
Phase TOC	CO11 - Extremely Inverse		
	Pickup (Tap)	0.5 - 2.5 Sec - 5A	1.500
	Time Dial		5.500

OCR: Relay2

MFR: GE Multilin

Model: 735/737

Tag #:

	CT	Base kV	If (kA)	
Phase:	350/5	13.800	6.19	3 ph, Asym. (Calc.)
			5.43	LG, Asym. (Calc.)
GND:	350/5	13.800	5.43	LG, Asym. (Calc.)

OC Level: OC1

		Range	Setting
Phase TOC	ANSI - Extremely Inverse		
	Pickup (Tap)	20 - 100 xCT Sec	20.000
	Time Dial		1.000
Ground TOC	Definite Time		
	Pickup (Tap)	15 - 55 xCT Sec	15.000
	Time Dial		1.000

OCR: Relay3

MFR: Siemens

Model: 7SJ600

Tag #:

	CT	Base kV	If (kA)	
CT Input:	350/5	4.160	4.61	3 ph, Asym. (Calc.)
			4.71	LG, Asym. (Calc.)

OC Level: OC1

		Range	Setting
Phase TOC	ANSI - Extremely Inverse		
	Pickup (Tap)	0.05 - 4 xCT Sec	0.380
	Time Dial		7.300
Phase INST	Pickup	0.05 - 25 xCT Sec	8.530
	Time Delay	0 - 60	0.010
Neutral TOC	ANSI - Extremely Inverse		
	Pickup (Tap)	0.05 - 4 xCT Sec	0.050
	Time Dial		0.500
Neutral INST	Pickup	0.05 - 25 xCT Sec	25.000
	Time Delay	0 - 60	0.010

Protective Device Settings

This is an example to show the features of STAR program.

OCR: Relay4

MFR: GE Multilin

Model: G60

Tag #:

PT Phase Ratio: 13.800kV/120.0V

	CT	Base kV	If (kA)	
Phase:	350/5	13.800	6.18	3 ph, Asym. (Calc.)
			5.35	LG, Asym. (Calc.)
GND:	450/5	13.800	5.35	LG, Asym. (Calc.)

OC Level: OC1

		Range	Setting
Phase TOC	I^2T		
	Pickup (Tap)	0.01 - 30 xCT Sec	0.033
	Time Dial		35.400
Phase INST	Pickup	0.01 - 30 xCT Sec	3.352
	Time Delay	0 - 600	0.020
Ground TOC	Definite Time		
	Pickup (Tap)	0.01 - 30 xCT Sec	0.010
	Time Dial		0.080
Ground INST	Pickup	0.01 - 30 xCT Sec	30.000
	Time Delay	0 - 600	0.010
Neutral TOC	I^2T		
	Pickup (Tap)	0.01 - 30 xCT Sec	0.075
	Time Dial		2.290
Neg-Seq TOC	I^2T		
	Pickup (Tap)	0.01 - 30 xCT Sec	0.087
	Time Dial		8.520
Neg-Seq INST	Pickup	0.01 - 30 xCT Sec	4.442
	Time Delay	0 - 600	0.030

		Setting	
Phase	Voltage Restraint	120.00	50 - 240

OLR: Relay3

MFR: Siemens

Model: 7SJ600

Tag #:

	CT	Base kV	If (kA)	
CT Input:	350/5	4.160	4.61	3 ph, Asym. (Calc.)
			4.71	LG, Asym. (Calc.)

		Range	Setting
Thermal	Thermal Curve (without preload)		
	Trip Multiplier	0.4 - 4 xCT Sec	0.400
Acceleration			
	Trip Multiplier		0.000

Fuse: Fuse1

MFR:	Southern States*	Tag #:		3-Phase kA:	4.74	Asym. (Calc.)
Model:	BPA-PE	kV:	34.500	LG kA:	4.47	Asym. (Calc.)
Speed:	Standard	Int. kA:	6.250	Base kV:	34.500	(Calc.)
Size:	50A	Cont. Amp:	65.000			

* Retrieved library data is modified by user.

Protective Device Settings

This is an example to show the features of STAR program.

Fuse: Fuse2

MFR:	RTE	Tag #:		3-Phase kA:	6.18	Asym. (Calc.)
Model:	358C	kV:	15.500	LG kA:	5.35	Asym. (Calc.)
Speed:	Other	Int. kA:	2.500	Base kV:	13.800	(Calc.)
Size:	C12	Cont. Amp:	50.000			

Fuse: Fuse3

MFR:		Tag #:		3-Phase kA:	4.61	Asym. (Calc.)
Model:		kV:	0.000	LG kA:	4.71	Asym. (Calc.)
Speed:		Int. kA:	0.000	Base kV:	4.160	(Calc.)
Size:		Cont. Amp:	0.000			

CB: CB2

MFR:		Tag #:		3-Phase kA:	20.82	(User Defined)
Model:		Rating:	42 kA, 0.6 kV	LG kA:	18.00	(User Defined)
Size:		Cont. Amp:	1600.000	Base kV:	0.480	(User Defined)

LV Solid State Trip Device

MFR: General Electric
Model: MVT-PM (WavePro LVPCB)
Sensor: 800(LSIG)
Rating Plug: 500.00

		Phase Setting			Ground Setting	
Long-Time	Pickup	1.100		Pickup	0.200	
	Band	2		Band	Min	I²t=OUT
Short-Time	Pickup	3.000				
	Band	Min(1)	I²t=OUT			

CB: CB3

MFR:	Cutler-Hammer	Tag #:		3-Phase kA:	19.04	Sym. (Calc.)
Model:	HMCP-F	Rating:	100 kA, 0.48 kV	LG kA:	19.92	Sym. (Calc.)
Size:	150	Cont. Amp:	150.000	Base kV:	0.480	(Calc.)

Motor Circuit Protector Trip Device

MFR: Cutler-Hammer
Model: HMCP
ID: 150T4
Pick up: E

OLH: OL1

MFR: Allen-Bradley
Model: Bulletin520-TypeJ
Type: In-Line
Tag #:

Thermal Typical Curve - Class 10
Trip Amp 130.000

	Base kV	If (kA)	
Phase:	0.480	25.26	Asym. (Calc.)
GND:	0.480	26.22	Asym. (Calc.)